

ARRIS TM822A

DOCSIS 3.0 CABLE MODEM

FEATURES

- DOCSIS® 3.0 certified
- EuroDOCSIS® 3.0 compliant
- PacketCable® 1.0/1.5 compliant and EuroPacketCable® 1.0/1.5 compliant
- Upgradeable to PacketCable® 2.0
- Dual-mode capable device for maximum flexibility across DOCSIS® and EuroDOCSIS® based networks
- Flexible 8x4 downstream/upstream channel bonding
- Backward compatible with DOCSIS 1.0, 1.1, and 2.0
- Up to two lanes of carrier-grade VoIP
- Multiple Protocol Support: PacketCable (NCS) or Session Initiation Protocol (SIP)
- IPv4 and IPv6 modes for DOCSIS CM
- 10/100/1000 Base-T Ethernet
- 6, 8, 12, 18, and 24 hour battery options available (TM822G only)
- Simplified interoperability through PacketACE™ config file editor



PRODUCT SPECIFICATIONS

PHYSICAL

Operating Temperature °F (°C)	32 to 122 (0 to 50)
Operating Relative Humidity	5-95% (Non-condensing)
Storage Temperature °F (°C)	-40 to 158 (-40 to 70)
Dimensions (H x W x D) in.	7.3 x 1.7 x 6.2
Weight (lbs.)	1.0
Diagnostic LEDs	Power, US/DS, Online, Link, Tel 1, Tel 2



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INTERFACES

RF Interface	External 75 ohm 'F' type connector
Data Interface	10/100/1000 Base-T Ethernet (RJ-45 connector)
Telephony Interface	2 lines; RJ-11
Input Voltage (nominal)	115-240 VAC 50.60 Hz
Power Switch Equipped	On TM822S model only
Power Consumption (W)	5.5 (idle)

TELEPHONY

Supervisory Voltage	48V DC nominal
Maximum Loop Length to CPE	1000 ft (305M) of 26 AWG (0.4mm) wire
Ringing Load Capacity	10 REN total; 5 per line
Provisionable High Loop Current Mode	Yes
Telcordia™ GR 1089 (Lightning and Power Surge) Tested	Yes
Programmable Interface for Worldwide Applications	Yes

RF DOWNSTREAM

Frequency Range (MHz)	108-1002 (edge-to-edge)
Bonded Channels	Up to 8
Number of Tuners	2
Capture Bandwidth (MHz)	96 (per tuner, 192 MHz total)
Modulation (QAM)	64 or 256
Data Rate (Mbps, Theoretical)	Up to 343
RF Input Sensitivity Level (dBmV)	-15 to +15
Carrier Bandwidth	6 MHz (DOCSIS mode) or 8 MHz (EuroDOCSIS mode)
Embedded MoCA® Immunity Filter	Yes



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RF UPSTREAM

Frequency Range (MHz)	5-42 (DOCSIS mode) or 5-65 (EuroDOCSIS mode)
Bonded Channels	Up to 4
Modulation	QPSK, 8 QAM, 16 QAM, 32 QAM, 64 QAM, 128 QAM (S-CDMA)
Modulation Bandwidth (kHz)	200, 400, 800, 1600, 3200, 6400 (TDMA) 1600, 3200, 6400 (S-CDMA)
Data Rate (Mbps, Theoretical)	Up to 122
RF Output Level (dBmV - one channel)	TDMA: +17 to 61 (QPSK) +17 to 58 (8 QAM, 16 QAM) +17 to 57 (32 QAM, 64 QAM) S-CDMA: +17 to 56 (all modulations)
Automatic Level Adjust	Yes
Frequency Stability (kHz)	±5
Output Impedance (Ohms) 48V DC nominal	75
RF UPSTREAM	
DOCSIS 3.0 / EuroDOCSIS 3.0	RoHS, WEEE
PacketCable 1.0 and 1.5	IEEE 802.3, IEEE 802.3ab
UL® 60950	RFC3261 SIP: Session Initiation Protocol
FCC Part 15 Class B	Codec: G.711, 64 kbps, μ-law and A-law encoded speech
CE	Enhanced codec support (G.726, G.728, G.729E)
CB	T.38 Fax Relay